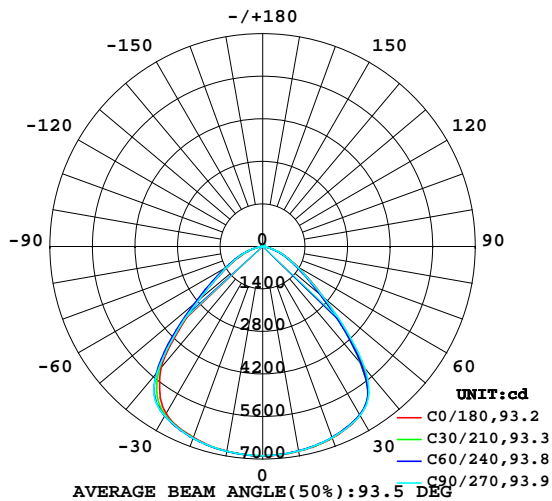


LUMINAIRE PHOTOMETRIC TEST REPORT

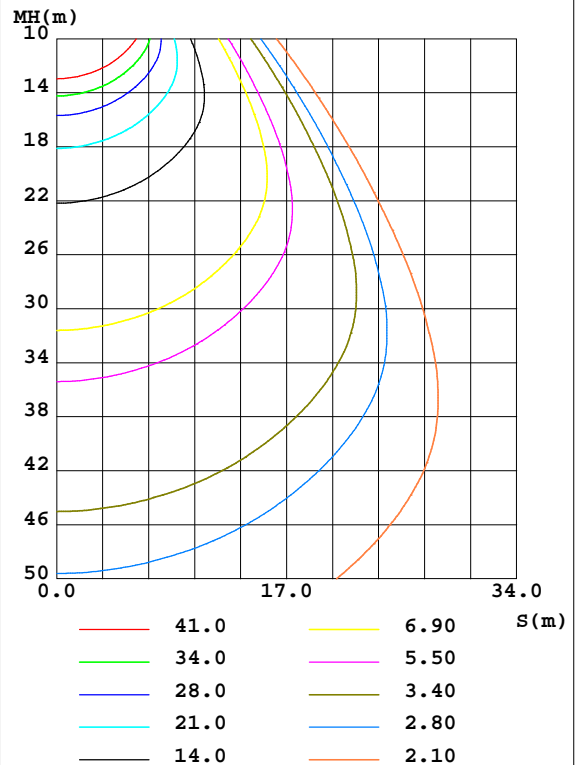
Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.41 lm/W			
HB2000-100G-C1-G5 288EA-90D_180914		Imax(cd)	6892	S/MH(C0/180)	1.33
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	15682	η UP,DN(C0-180)	0.9,48.2
NOMINAL FLUX(lm)	15682.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.7,50.2
LAMPS INSIDE	1	η up(%)	1.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	98.4	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	6838	6826	6831	6831	6839	6844	6843	6845	0- 10	654.9	654.9	4.18,4.18
20	6708	6688	6689	6680	6687	6715	6712	6717	10- 20	1919	2574	16.4,16.4
30	6415	6398	6407	6330	6356	6429	6440	6443	20- 30	3038	5612	35.8,35.8
40	5151	5003	5232	5122	5201	5373	5390	5351	30- 40	3729	9341	59.6,59.6
50	2642	2511	2634	2680	2742	2936	2761	2824	40- 50	3022	12363	78.8,78.8
60	1315	1244	1265	1274	1309	1425	1353	1380	50- 60	1714	14076	89.8,89.8
70	604.9	557.2	575.9	544.4	578.7	665.8	653.1	647.4	60- 70	928.5	15005	95.7,95.7
80	143.2	119.2	130.5	127.7	135.3	157.8	147.7	156.4	70- 80	355.9	15361	97.9,97.9
90	23.28	21.37	28.45	24.79	18.26	18.01	24.87	19.53	80- 90	70.90	15432	98.4,98.4
100	23.55	23.86	23.93	23.73	17.49	16.44	16.91	16.82	90-100	20.33	15452	98.5,98.5
110	31.44	32.64	32.60	32.44	25.38	25.19	26.27	25.60	100-110	25.86	15478	98.7,98.7
120	40.60	41.72	42.40	41.79	34.70	34.16	35.97	34.60	110-120	33.27	15511	98.9,98.9
130	49.18	50.06	51.06	50.07	43.82	42.80	44.54	43.00	120-130	38.20	15549	99.2,99.2
140	56.80	57.46	57.59	57.39	52.03	50.55	51.37	50.98	130-140	39.14	15588	99.4,99.4
150	63.29	63.79	63.78	63.78	59.17	57.95	58.40	57.99	140-150	36.15	15625	99.6,99.6
160	70.04	70.62	70.60	70.62	67.11	66.11	66.52	66.27	150-160	29.75	15654	99.8,99.8
170	77.21	77.58	77.44	77.59	75.69	74.99	75.03	74.85	160-170	20.46	15675	100,100
180	80.73	81.03	80.37	80.81	80.77	81.03	80.36	80.82	170-180	7.460	15682	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 11037 lm

%lum = 70.4%

%lamp = 70.4%

Conical surface Flux(120deg): 14076 lm

%lum = 89.8%

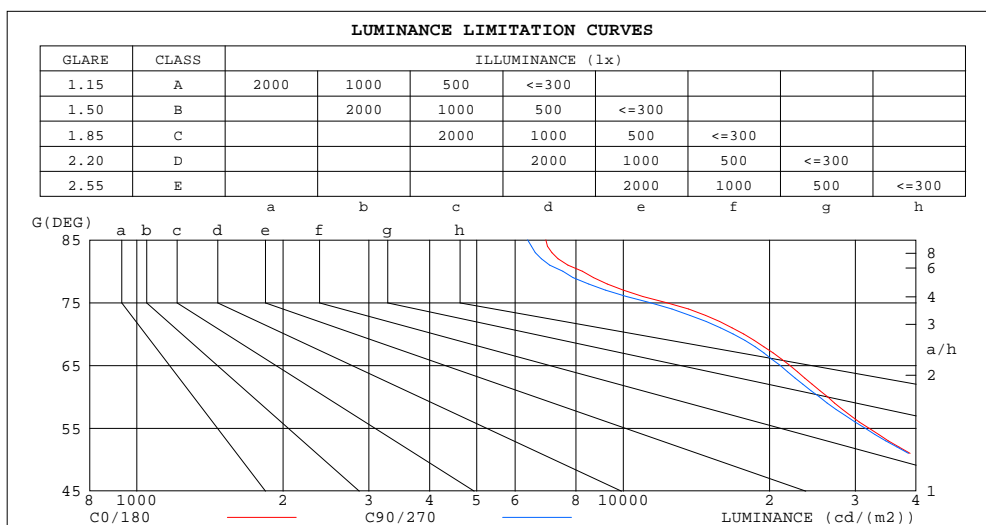
%lamp = 89.8%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

LUMINANCE LIMITATION CURVES

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6936	6360
80	8244	7515
75	12258	11343
70	17687	16839
65	21991	21018
60	26308	25303
55	31970	31402
50	41102	40982
45	53892	54576

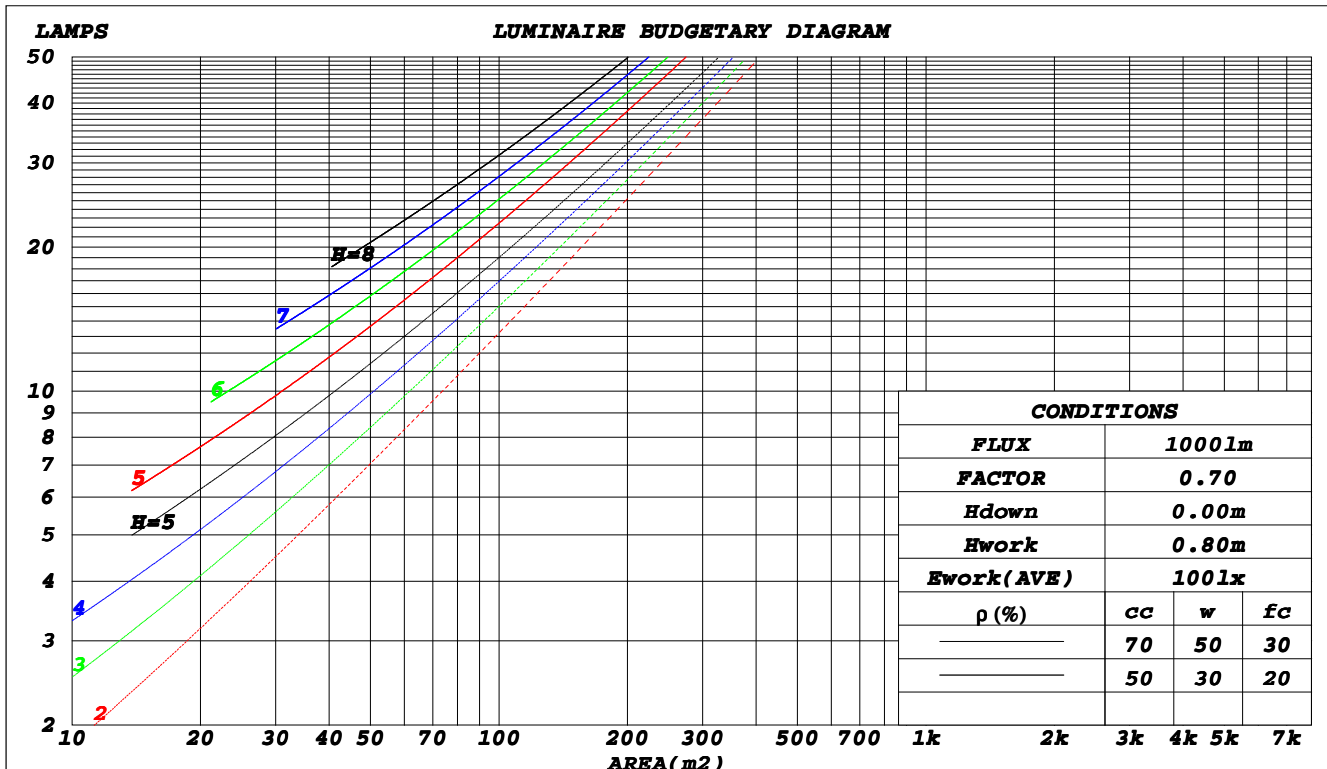
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.98
1.0	1.07	1.03	1.00	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.92	.90	.89	.87
2.0	.96	.90	.85	.94	.88	.84	.90	.86	.82	.86	.83	.80	.83	.80	.78	.76
3.0	.86	.79	.73	.84	.78	.72	.81	.76	.71	.78	.74	.70	.75	.72	.68	.66
4.0	.77	.70	.64	.76	.69	.63	.73	.67	.62	.71	.66	.61	.69	.64	.60	.58
5.0	.70	.62	.56	.69	.61	.56	.66	.60	.55	.64	.59	.54	.63	.58	.54	.52
6.0	.63	.55	.50	.62	.55	.49	.61	.54	.49	.59	.53	.48	.57	.52	.48	.46
7.0	.58	.50	.44	.57	.50	.44	.56	.49	.44	.54	.48	.43	.53	.47	.43	.41
8.0	.53	.45	.40	.52	.45	.40	.51	.44	.40	.50	.44	.39	.49	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.45	.39	.35	.34
10.0	.45	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.42	.36	.32	.31



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

WEC AND CCEC

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)										
0.0																	
1.0	.247	.140	.044	.240	.137	.043	.226	.130	.041	.213	.123	.039	.201	.117	.038		
2.0	.239	.131	.040	.233	.128	.040	.221	.123	.038	.210	.118	.037	.199	.113	.036		
3.0	.227	.121	.036	.222	.119	.036	.211	.114	.035	.201	.110	.034	.192	.106	.033		
4.0	.214	.111	.033	.209	.109	.032	.200	.106	.032	.191	.103	.031	.183	.099	.030		
5.0	.202	.103	.030	.197	.101	.029	.189	.098	.029	.181	.096	.028	.174	.093	.028		
6.0	.190	.095	.027	.186	.094	.027	.178	.091	.027	.171	.089	.026	.165	.087	.026		
7.0	.179	.088	.025	.175	.087	.025	.169	.085	.025	.162	.083	.024	.157	.081	.024		
8.0	.169	.083	.023	.166	.082	.023	.160	.080	.023	.154	.078	.023	.149	.076	.022		
9.0	.160	.077	.022	.157	.077	.021	.152	.075	.021	.146	.073	.021	.142	.072	.021		
10.0	.152	.073	.020	.149	.072	.020	.144	.071	.020	.139	.069	.020	.135	.068	.019		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.203	.203	.203	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.188	.169	.152	.161	.145	.130	.110	.100	.090	.063	.058	.052	.020	.019	.017	
2.0	.178	.145	.117	.152	.124	.101	.104	.086	.070	.060	.050	.041	.019	.016	.013	
3.0	.169	.126	.093	.145	.109	.080	.099	.076	.056	.057	.044	.033	.018	.014	.011	
4.0	.161	.113	.076	.138	.097	.066	.095	.068	.046	.055	.040	.028	.018	.013	.009	
5.0	.153	.102	.064	.132	.088	.056	.091	.062	.039	.053	.036	.023	.017	.012	.008	
6.0	.147	.093	.055	.126	.081	.048	.087	.057	.034	.050	.033	.020	.016	.011	.007	
7.0	.141	.086	.049	.121	.075	.042	.084	.053	.030	.049	.031	.018	.016	.010	.006	
8.0	.135	.081	.043	.116	.070	.038	.080	.049	.027	.047	.029	.016	.015	.009	.005	
9.0	.129	.076	.040	.111	.066	.034	.077	.046	.024	.045	.027	.015	.015	.009	.005	
10.0	.124	.071	.036	.107	.062	.032	.074	.044	.023	.043	.026	.013	.014	.008	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

UGR(Unified Glare Rating) Table

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm										
NAME: HB2000-100G-C1-G5 288EA-90D_180914					TYPE:LED			WEIGHT:		
SPEC.:G5 288					DIM.:			SERIAL No.:		
MFR.: ICEPIPE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	24.2	25.5	24.5	25.8	26.0	24.1	25.4	24.4	25.7	25.9
3H	24.7	25.9	25.0	26.2	26.4	24.6	25.8	24.9	26.0	26.3
4H	24.8	25.9	25.1	26.2	26.5	24.6	25.8	25.0	26.0	26.3
6H	24.8	25.9	25.1	26.1	26.4	24.6	25.7	25.0	26.0	26.3
8H	24.8	25.8	25.1	26.1	26.4	24.6	25.6	24.9	25.9	26.2
12H	24.7	25.7	25.1	26.0	26.4	24.6	25.5	24.9	25.8	26.2
4H 2H	24.4	25.5	24.7	25.8	26.0	24.3	25.4	24.6	25.7	25.9
3H	25.0	25.9	25.3	26.3	26.6	24.8	25.8	25.2	26.1	26.4
4H	25.1	26.0	25.5	26.3	26.7	24.9	25.8	25.3	26.2	26.5
6H	25.1	25.9	25.6	26.3	26.7	25.0	25.7	25.4	26.1	26.5
8H	25.1	25.9	25.6	26.3	26.7	24.9	25.7	25.4	26.1	26.5
12H	25.1	25.8	25.6	26.2	26.6	24.9	25.6	25.4	26.0	26.4
8H 4H	25.1	25.8	25.5	26.2	26.6	24.9	25.6	25.3	26.0	26.4
6H	25.1	25.7	25.6	26.2	26.6	25.0	25.6	25.4	26.0	26.4
8H	25.2	25.7	25.6	26.1	26.6	25.0	25.5	25.5	25.9	26.4
12H	25.2	25.6	25.7	26.1	26.6	25.0	25.4	25.5	25.9	26.4
12H 4H	25.0	25.7	25.5	26.1	26.5	24.9	25.5	25.3	25.9	26.4
6H	25.1	25.6	25.6	26.1	26.6	24.9	25.5	25.4	25.9	26.4
8H	25.1	25.6	25.6	26.1	26.6	25.0	25.4	25.4	25.9	26.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 1.2					+ 0.9 / - 1.2				
1.5H	+ 0.9 / - 0.8					+ 1.0 / - 1.0				
2.0H	+ 2.0 / - 1.4					+ 2.2 / - 1.5				

CIE Pub.117 Corrected 15682 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.6)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

UTILIZATION FACTORS TABLE

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

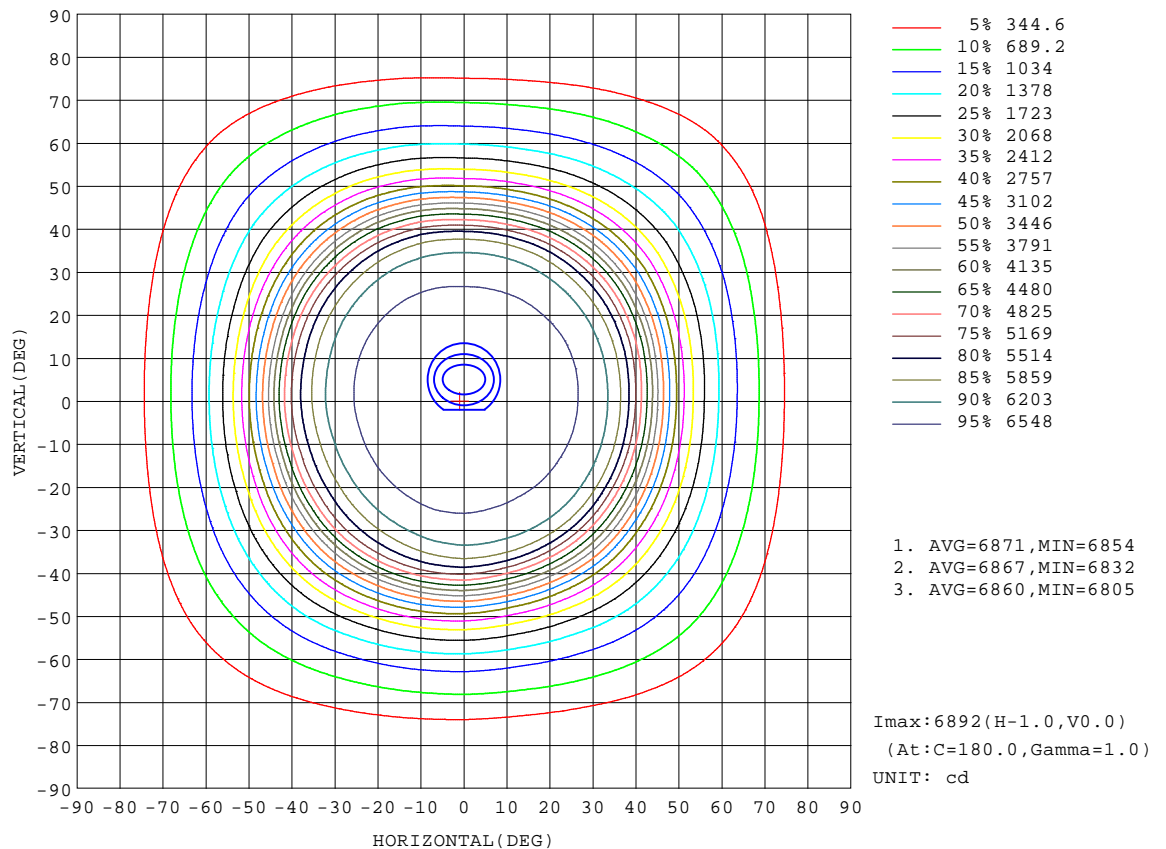
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	65	56	50	64	55	50	44
0.80	76	66	60	75	66	60	73	65	60	54
1.00	84	75	69	83	74	69	81	75	68	62
1.25	90	82	76	89	81	76	86	80	75	69
1.50	95	87	81	93	86	81	90	84	80	73
2.00	100	94	89	99	92	88	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	101	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	99	102	99	97	88
5.00	111	107	104	108	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

ISOCANDELA DIAGRAM

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



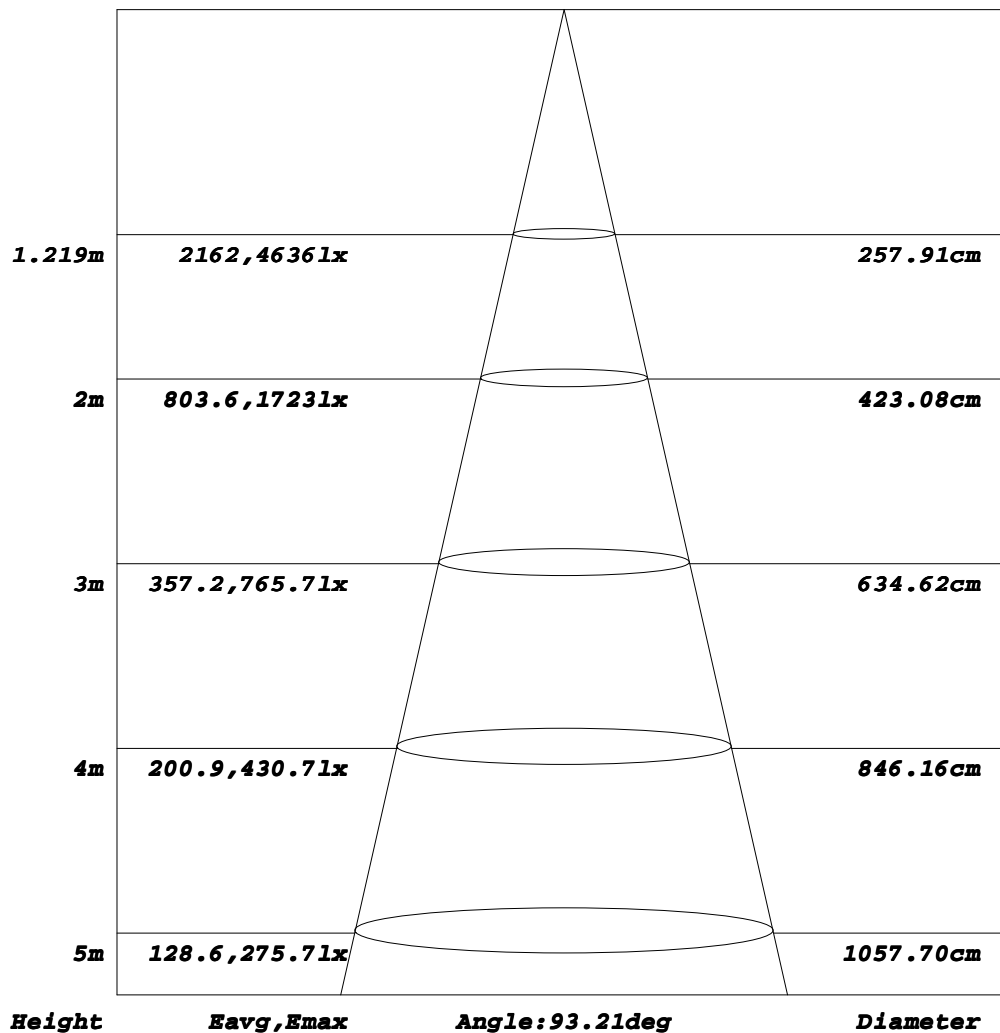
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

AAI Figure

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Flux out:11613 lm



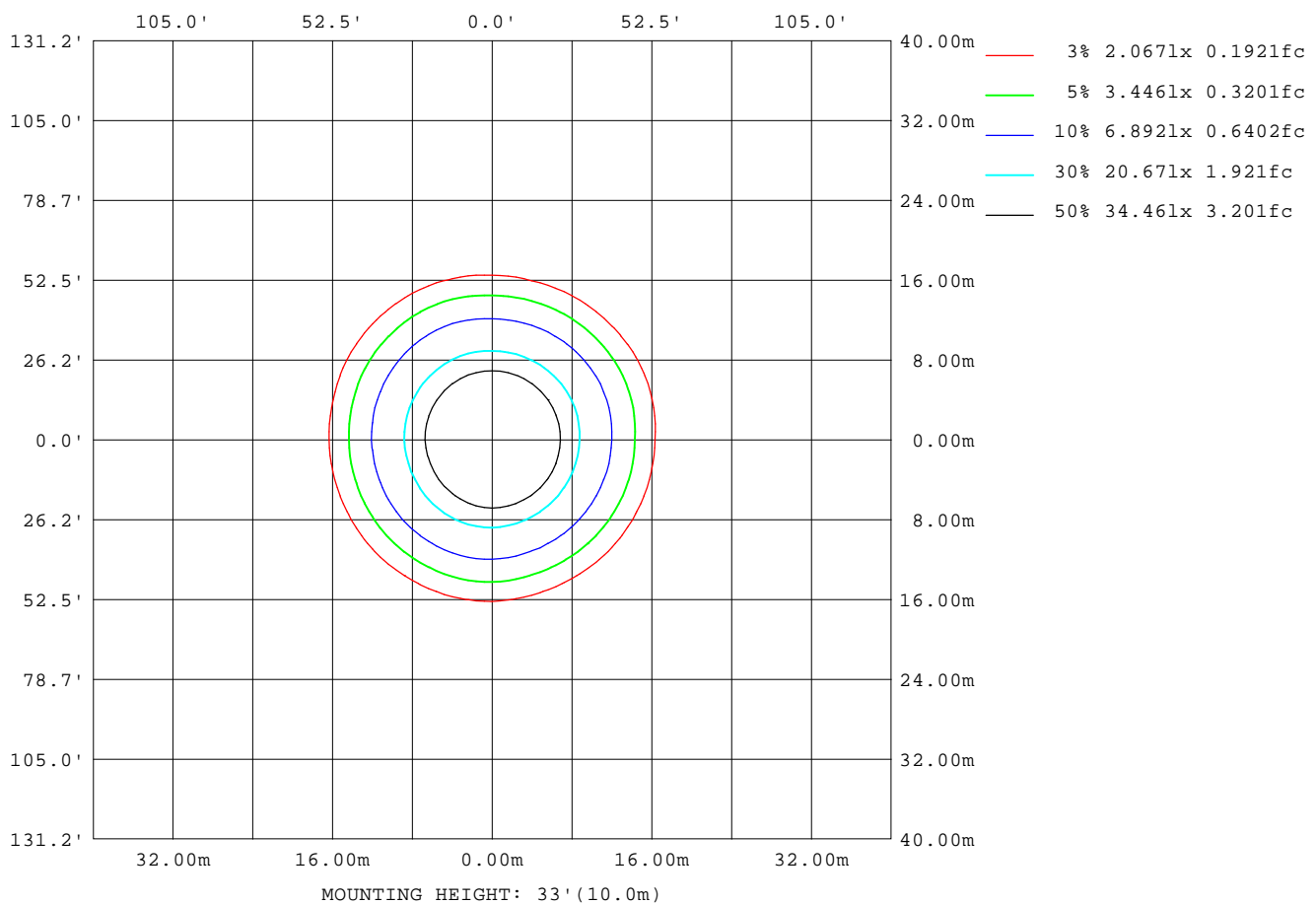
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

ISOLUX DIAGRAM

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

LED Avg.L Report

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

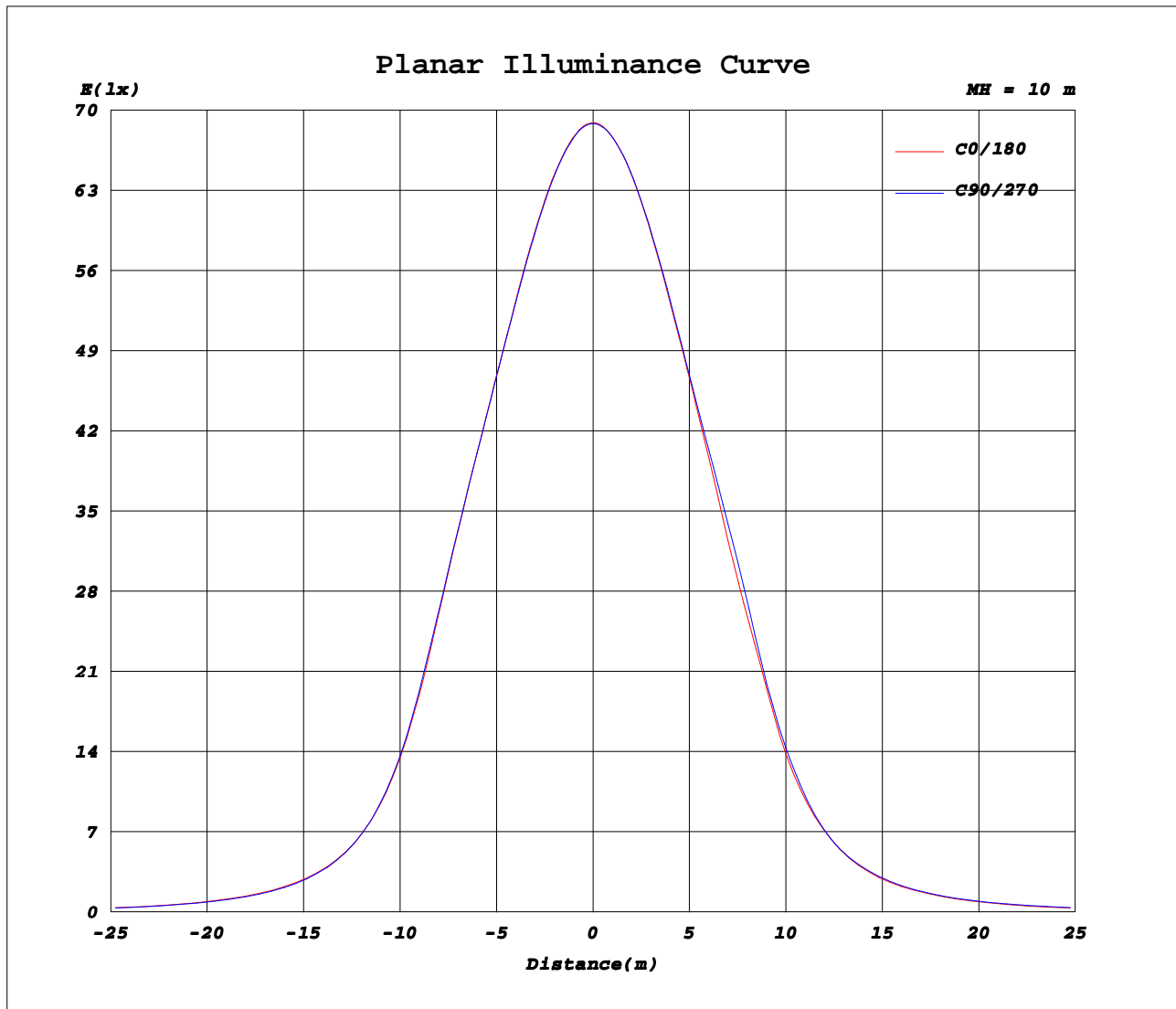
AvgL	cd/m2
L_0~180(65)av	21690
L_0~180(75)av	12180
L_0~180(85)av	6522
L_90~270(65)av	21854
L_90~270(75)av	12379
L_90~270(85)av	6828
L_45(65)av	22074
L_45(75)av	12391
L_45(85)av	6395

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	6892	6891	6889	6885	6885	6884	6885	6887	6886	6889	6887	6887	6892	6891	6889	6885	6885	6884	6885
5	6873	6869	6868	6867	6867	6861	6870	6870	6868	6874	6872	6872	6875	6878	6878	6879	6878	6877	6872
10	6838	6836	6830	6826	6826	6824	6831	6835	6830	6831	6833	6831	6839	6844	6844	6844	6847	6846	6843
15	6790	6785	6779	6771	6771	6772	6777	6776	6765	6767	6765	6768	6779	6786	6792	6792	6796	6797	6790
20	6708	6703	6695	6688	6685	6682	6689	6690	6684	6680	6671	6674	6687	6696	6708	6715	6721	6721	6712
25	6591	6583	6570	6566	6561	6568	6577	6578	6564	6553	6547	6548	6567	6578	6593	6598	6606	6608	6597
30	6415	6407	6401	6398	6386	6394	6407	6391	6357	6330	6305	6314	6356	6380	6410	6429	6449	6451	6440
35	6050	6037	6021	6029	6029	6043	6071	6014	5923	5854	5802	5815	5905	5968	6046	6101	6154	6178	6168
40	5151	5059	4992	5003	5033	5100	5232	5230	5170	5122	5056	5087	5201	5246	5321	5373	5443	5479	5390
45	3811	3735	3671	3678	3671	3727	3859	3872	3827	3802	3750	3770	3911	3969	4078	4146	4224	4194	4058
50	2642	2569	2520	2511	2490	2514	2634	2672	2668	2680	2662	2649	2742	2800	2864	2936	2967	2902	2761
55	1834	1811	1780	1764	1724	1734	1801	1820	1810	1825	1821	1825	1868	1915	2003	2031	2044	2000	1911
60	1315	1282	1265	1244	1211	1220	1265	1268	1266	1274	1274	1281	1309	1342	1410	1425	1434	1409	1353
65	929	903	894	875	859	860	888	885	873	873	867	881	904	937	988	1000	1013	1001	959
70	605	586	573	557	548	555	576	570	556	544	544	557	579	608	648	666	685	684	653
75	317	300	279	272	261	274	294	299	289	288	283	295	313	332	359	369	378	374	347
80	143	133	125	119	116	119	131	132	131	128	126	129	135	142	154	158	161	158	148
85	60.4	56.2	51.3	49.2	48.6	50.3	55.4	56.0	54.5	52.8	50.1	51.8	53.2	58.3	62.8	54.9	65.8	59.8	63.6
90	23.3	22.4	22.3	21.4	23.4	26.6	28.5	27.2	27.3	24.8	23.0	22.6	18.3	18.6	20.1	18.0	21.1	24.3	24.9
95	20.7	20.8	20.7	20.5	21.2	22.2	23.1	22.6	21.3	20.5	20.6	20.9	14.6	14.5	13.8	13.2	13.2	13.5	13.9
100	23.5	23.7	23.9	23.9	24.1	24.2	23.9	23.9	23.8	23.7	23.9	24.0	17.5	17.2	16.7	16.4	16.3	16.5	16.9
105	27.2	27.5	27.9	28.2	28.2	28.2	27.8	27.7	27.8	27.8	28.2	28.0	21.1	21.0	21.0	20.6	20.4	20.6	21.3
110	31.4	31.8	32.3	32.6	32.9	33.0	32.6	32.4	32.3	32.4	32.6	32.2	25.4	25.1	25.0	25.2	25.2	25.6	26.3
115	36.0	36.3	36.6	37.3	37.8	37.8	37.4	37.2	37.2	37.2	36.9	36.7	30.0	29.6	29.3	29.7	30.2	30.6	31.3
120	40.6	40.9	41.1	41.7	42.5	42.9	42.4	42.3	42.2	41.8	41.3	41.3	34.7	34.3	33.8	34.2	34.8	35.3	36.0
125	45.0	45.3	45.6	45.9	47.0	47.5	47.2	47.0	46.6	46.0	45.8	45.8	39.4	39.0	38.5	38.6	39.3	39.8	40.6
130	49.2	49.5	49.7	50.1	50.8	51.2	51.1	50.9	50.5	50.1	50.0	50.1	43.8	43.4	42.9	42.8	43.4	43.9	44.5
135	53.2	53.6	53.8	53.9	54.2	54.6	54.5	54.4	54.0	53.9	54.1	54.0	48.0	47.6	47.1	46.8	46.9	47.4	48.1
140	56.8	57.2	57.5	57.5	57.7	57.8	57.6	57.6	57.4	57.4	57.7	57.7	52.0	51.5	51.0	50.6	50.6	50.9	51.4
145	60.3	60.5	60.6	60.7	60.9	60.9	60.8	60.7	60.6	60.6	60.9	60.9	55.7	55.1	54.6	54.3	54.2	54.4	54.9
150	63.3	63.5	63.5	63.8	64.0	63.9	63.8	63.7	63.7	63.8	63.9	63.9	59.2	58.6	58.1	57.9	57.8	57.9	58.4
155	66.3	66.5	66.6	66.9	67.2	67.1	66.9	66.9	66.9	66.9	67.0	66.9	62.8	62.3	61.8	61.6	61.5	61.7	62.2
160	70.0	70.2	70.4	70.6	70.8	70.9	70.6	70.6	70.7	70.6	70.7	70.6	67.1	66.7	66.2	66.1	65.9	66.1	66.5
165	74.1	74.2	74.3	74.4	74.6	74.8	74.4	74.5	74.3	74.4	74.6	74.5	71.9	71.6	71.1	70.8	70.6	70.8	71.2
170	77.2	77.3	77.3	77.6	77.9	77.9	77.4	77.4	77.5	77.6	77.7	77.6	75.7	75.6	75.4	75.0	74.7	74.7	75.0
175	79.4	79.5	79.6	80.1	80.2	80.0	79.6	79.6	79.7	79.8	79.9	79.6	78.8	78.7	78.8	78.6	78.3	78.2	78.4
180	80.7	80.7	80.8	81.0	80.7	80.4	80.4	80.4	80.6	80.8	80.5	80.4	80.8	80.7	80.8	81.0	80.7	80.4	80.4

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LUC
Test Date:03 January 2018
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.5011A P:104.3W PF:0.9457 Lamp Flux:15682.3x1 lm		
NAME: HB2000-100G-C1-G5 288EA-90D_180914	TYPE:LED	WEIGHT:
SPEC.:G5 288	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	285	300	315	330	345														
0	6887	6886	6889	6887	6887														
5	6877	6872	6878	6877	6877														
10	6841	6842	6845	6846	6845														
15	6791	6792	6790	6798	6799														
20	6711	6717	6717	6722	6715														
25	6599	6596	6604	6609	6603														
30	6447	6443	6443	6445	6437														
35	6165	6156	6125	6117	6091														
40	5375	5385	5351	5343	5284														
45	4037	4071	4065	4058	3962														
50	2750	2791	2824	2834	2753														
55	1904	1939	1961	1981	1933														
60	1338	1363	1380	1413	1386														
65	953	968	983	1000	984														
70	645	650	647	658	644														
75	347	352	354	364	351														
80	149	154	156	161	154														
85	63.9	66.1	66.0	67.1	63.5														
90	22.7	22.6	19.5	19.2	19.3														
95	13.8	13.5	13.6	14.3	14.8														
100	16.9	16.8	16.8	17.0	17.3														
105	21.2	20.9	21.0	21.0	20.9														
110	26.1	25.7	25.6	25.0	25.0														
115	31.2	30.6	30.1	29.4	29.4														
120	35.9	35.2	34.6	33.8	34.0														
125	40.4	39.7	38.9	38.3	38.6														
130	44.3	43.7	43.0	42.6	42.8														
135	47.9	47.2	47.1	47.0	47.1														
140	51.3	50.9	51.0	51.0	51.0														
145	54.9	54.7	54.5	54.5	54.7														
150	58.4	58.2	58.0	58.0	58.3														
155	62.1	62.0	61.9	61.7	62.0														
160	66.5	66.3	66.3	66.0	66.2														
165	71.2	70.9	70.8	70.6	70.8														
170	75.2	75.0	74.8	74.7	74.8														
175	78.5	78.5	78.4	78.0	78.1														
180	80.4	80.6	80.8	80.5	80.4														

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:LUC

Test Date:03 January 2018

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity:65.0%

Test Distance:8.000m [K=1.0000]

Remarks: HB2000-100G-C1-G5 288EA-90D_180914

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	6892	6891	6889	6885	6885	6884	6885	6887	6886	6889
3.0	6887	6882	6878	6877	6875	6875	6878	6876	6880	6877
6.0	6871	6864	6861	6862	6860	6854	6861	6861	6865	6862
9.0	6846	6847	6835	6837	6837	6837	6840	6841	6839	6839
12.0	6826	6818	6812	6808	6805	6809	6813	6815	6807	6805
15.0	6790	6785	6779	6771	6771	6772	6777	6776	6765	6767
18.0	6748	6741	6732	6727	6723	6727	6732	6730	6720	6716
21.0	6689	6682	6672	6666	6661	6660	6669	6671	6659	6657
24.0	6617	6611	6596	6592	6587	6591	6606	6602	6591	6580
27.0	6534	6521	6510	6507	6502	6505	6520	6516	6495	6484
30.0	6415	6407	6401	6398	6386	6394	6407	6391	6357	6330
33.0	6241	6232	6221	6222	6220	6225	6246	6206	6138	6085
36.0	5923	5903	5882	5892	5894	5913	5952	5887	5793	5725
39.0	5389	5315	5242	5254	5283	5345	5443	5417	5356	5296
42.0	4632	4550	4474	4484	4498	4565	4712	4717	4677	4634
45.0	3811	3735	3671	3678	3671	3727	3859	3872	3827	3802
48.0	3062	2998	2914	2935	2905	2958	3086	3110	3101	3099
51.0	2447	2389	2348	2336	2310	2326	2430	2472	2467	2485
54.0	1969	1943	1905	1893	1854	1864	1936	1963	1950	1966
57.0	1598	1575	1550	1529	1490	1504	1560	1572	1564	1588
60.0	1315	1282	1265	1244	1211	1220	1265	1268	1266	1274
63.0	1073	1042	1030	1009	989.4	991.5	1025	1027	1016	1022
66.0	861.2	839.0	828.5	810.8	797.5	800.1	822.6	819.3	803.3	801.1
69.0	666.4	647.7	636.5	620.7	611.6	615.6	638.0	629.5	613.5	603.3
72.0	487.7	467.3	450.7	434.7	425.5	432.8	458.2	454.5	443.7	434.5
75.0	317.3	299.9	279.1	272.3	261.1	274.0	293.6	298.5	289.4	287.9
78.0	192.8	181.8	171.2	164.5	159.4	164.3	176.6	179.2	176.2	175.5
81.0	120.5	113.5	105.8	101.5	99.03	101.9	110.5	112.7	110.6	109.0
84.0	73.04	68.52	63.50	60.94	60.10	61.87	67.72	68.46	66.70	65.10
87.0	37.55	35.10	33.29	31.57	32.40	33.56	35.94	35.25	34.59	32.82
90.0	23.28	22.41	22.31	21.37	23.42	26.57	28.45	27.18	27.29	24.79
93.0	19.09	19.17	19.29	19.57	21.03	22.85	23.99	23.23	21.36	19.57
96.0	21.37	21.51	21.40	21.11	21.67	22.42	23.03	22.60	21.57	21.04
99.0	22.96	23.17	23.27	23.10	23.43	23.53	23.55	23.31	23.09	22.97
102.0	24.93	25.12	25.35	25.45	25.66	25.66	25.28	25.23	25.27	25.26
105.0	27.19	27.47	27.92	28.24	28.18	28.19	27.83	27.71	27.77	27.83
108.0	29.70	30.06	30.73	30.85	30.91	31.04	30.63	30.48	30.42	30.49
111.0	32.33	32.64	33.17	33.61	33.88	33.92	33.55	33.34	33.27	33.40
114.0	35.05	35.39	35.74	36.40	36.75	36.85	36.46	36.25	36.23	36.33
117.0	37.83	38.14	38.42	39.19	39.83	39.81	39.37	39.28	39.22	39.06
120.0	40.60	40.89	41.08	41.72	42.53	42.93	42.40	42.34	42.17	41.79
123.0	43.30	43.60	43.83	44.23	45.22	45.71	45.43	45.22	44.86	44.32
126.0	45.81	46.16	46.39	46.78	47.83	48.27	48.06	47.83	47.47	46.88
129.0	48.33	48.68	48.81	49.29	50.15	50.48	50.35	50.14	49.80	49.29
132.0	50.81	51.12	51.37	51.65	52.20	52.66	52.50	52.31	51.98	51.66
135.0	53.18	53.59	53.76	53.92	54.24	54.58	54.51	54.42	54.00	53.93
138.0	55.41	55.78	56.03	56.13	56.28	56.50	56.43	56.29	56.04	56.02
141.0	57.53	57.91	58.11	58.13	58.36	58.49	58.23	58.20	58.08	58.08
144.0	59.71	59.95	59.96	60.00	60.26	60.38	60.12	60.12	59.99	59.99
147.0	61.48	61.69	61.72	61.94	62.18	62.16	61.93	61.91	61.90	61.90
150.0	63.29	63.49	63.50	63.79	64.00	63.91	63.78	63.73	63.70	63.78
153.0	65.06	65.25	65.27	65.58	65.88	65.77	65.59	65.52	65.63	65.57
156.0	67.02	67.20	67.33	67.56	67.84	67.82	67.57	67.56	67.62	67.61
159.0	69.26	69.45	69.65	69.88	70.09	70.10	69.80	69.82	69.89	69.85
162.0	71.62	71.83	72.03	72.17	72.43	72.46	72.19	72.22	72.18	72.19
165.0	74.07	74.23	74.33	74.42	74.63	74.78	74.42	74.47	74.34	74.40
168.0	76.14	76.25	76.30	76.42	76.67	76.79	76.35	76.32	76.33	76.38
171.0	77.71	77.82	77.86	78.10	78.40	78.33	77.94	77.96	78.07	78.13
174.0	79.02	79.08	79.20	79.58	79.79	79.67	79.26	79.32	79.34	79.45
177.0	80.22	80.36	80.48	80.84	80.89	80.45	80.21	80.18	80.26	80.37
180.0	80.73	80.74	80.79	81.03	80.72	80.37	80.37	80.40	80.62	80.81
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	6887	6887	6892	6891	6889	6885	6885	6884	6885	6887
3.0	6877	6881	6886	6885	6886	6885	6884	6882	6880	6886
6.0	6870	6864	6869	6873	6872	6872	6873	6871	6866	6869
9.0	6843	6843	6848	6852	6856	6852	6852	6853	6852	6852
12.0	6807	6810	6818	6827	6828	6829	6830	6827	6824	6824
15.0	6765	6768	6779	6786	6792	6792	6796	6797	6790	6791
18.0	6712	6717	6726	6736	6742	6751	6753	6755	6747	6752
21.0	6649	6653	6663	6675	6686	6694	6700	6700	6692	6691
24.0	6578	6579	6594	6605	6623	6620	6632	6632	6624	6624
27.0	6471	6473	6499	6518	6532	6542	6549	6548	6536	6540
30.0	6305	6314	6356	6380	6410	6429	6449	6451	6440	6447

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: LUC

Test Date: 03 January 2018

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity: 65.0%

Test Distance: 8.000m [K=1.0000]

Remarks: HB2000-100G-C1-G5 288EA-90D_180914

Photometric Data Table [cd]

33.0	6044	6058	6126	6171	6228	6266	6301	6316	6306	6307
36.0	5675	5690	5778	5839	5931	5996	6060	6091	6071	6069
39.0	5246	5261	5362	5414	5492	5556	5633	5677	5622	5613
42.0	4567	4609	4764	4822	4896	4934	4995	4995	4869	4850
45.0	3750	3770	3911	3969	4078	4146	4224	4194	4058	4037
48.0	3060	3072	3172	3221	3314	3381	3431	3390	3262	3227
51.0	2469	2457	2543	2600	2668	2727	2745	2683	2552	2548
54.0	1960	1960	2014	2064	2146	2182	2196	2146	2052	2045
57.0	1580	1586	1618	1658	1739	1763	1777	1742	1666	1653
60.0	1274	1281	1309	1342	1410	1425	1434	1409	1353	1338
63.0	1018	1030	1052	1087	1141	1154	1163	1149	1100	1094
66.0	797.0	810.6	833.3	866.1	914.4	929.6	942.8	933.8	895.1	889.1
69.0	601.9	616.2	639.0	667.3	711.0	731.2	748.2	745.9	713.4	706.3
72.0	432.0	445.0	468.2	493.5	527.6	541.6	559.1	558.5	527.9	524.2
75.0	283.3	295.0	313.2	332.3	358.9	368.9	378.5	373.8	347.2	346.5
78.0	171.6	177.4	187.6	197.7	215.1	219.8	224.5	221.0	204.8	205.1
81.0	106.4	109.4	114.8	121.1	130.4	134.7	135.8	135.4	125.7	128.4
84.0	62.82	64.60	66.72	71.94	76.90	72.70	79.45	75.63	76.51	76.77
87.0	31.17	31.50	30.59	34.20	38.37	34.44	42.38	39.33	41.60	40.81
90.0	23.02	22.58	18.26	18.56	20.05	18.01	21.13	24.25	24.87	22.73
93.0	19.13	19.21	13.06	12.89	12.38	12.30	14.10	17.36	17.26	15.38
96.0	21.26	21.69	15.37	15.20	14.43	13.78	13.61	13.79	14.16	14.14
99.0	23.26	23.47	17.02	16.76	16.10	15.72	15.60	15.76	16.16	16.18
102.0	25.51	25.49	18.86	18.60	18.22	17.94	17.89	18.08	18.55	18.51
105.0	28.23	27.99	21.11	21.02	20.99	20.60	20.38	20.64	21.33	21.18
108.0	30.91	30.52	23.63	23.40	23.38	23.32	23.17	23.62	24.26	24.08
111.0	33.42	33.07	26.26	25.96	25.79	26.06	26.18	26.61	27.30	27.15
114.0	36.05	35.75	29.05	28.71	28.38	28.72	29.24	29.48	30.25	30.17
117.0	38.69	38.47	31.87	31.50	31.12	31.55	32.00	32.67	33.35	33.20
120.0	41.31	41.28	34.70	34.35	33.80	34.16	34.76	35.30	35.97	35.86
123.0	44.03	44.00	37.54	37.16	36.62	36.74	37.43	38.04	38.68	38.54
126.0	46.66	46.68	40.26	39.90	39.36	39.44	40.19	40.69	41.45	41.29
129.0	49.19	49.24	42.96	42.55	41.99	41.99	42.74	43.13	43.82	43.63
132.0	51.70	51.72	45.55	45.11	44.60	44.38	44.86	45.42	46.05	45.83
135.0	54.10	54.04	47.98	47.58	47.08	46.80	46.89	47.41	48.12	47.89
138.0	56.39	56.32	50.43	49.96	49.50	49.09	49.09	49.46	50.05	49.87
141.0	58.40	58.33	52.78	52.22	51.71	51.34	51.30	51.61	52.08	52.00
144.0	60.26	60.25	55.00	54.37	53.84	53.57	53.50	53.80	54.24	54.14
147.0	62.12	62.09	57.10	56.49	56.01	55.83	55.63	55.88	56.32	56.28
150.0	63.93	63.86	59.17	58.57	58.11	57.95	57.80	57.94	58.40	58.35
153.0	65.67	65.65	61.30	60.74	60.28	60.08	60.00	60.11	60.57	60.55
156.0	67.66	67.58	63.55	63.09	62.60	62.45	62.35	62.47	62.94	62.92
159.0	69.92	69.80	66.18	65.75	65.27	65.14	65.03	65.12	65.59	65.54
162.0	72.31	72.15	69.01	68.65	68.24	68.01	67.82	68.00	68.41	68.36
165.0	74.63	74.46	71.88	71.58	71.14	70.80	70.56	70.80	71.18	71.20
168.0	76.67	76.54	74.26	74.15	73.79	73.43	73.11	73.26	73.53	73.69
171.0	78.26	78.08	76.32	76.30	76.07	75.78	75.51	75.46	75.71	75.86
174.0	79.49	79.26	78.17	78.11	78.15	77.91	77.70	77.56	77.75	77.88
177.0	80.51	80.14	79.92	79.79	79.90	79.68	79.40	79.24	79.40	79.49
180.0	80.50	80.38	80.77	80.73	80.81	81.03	80.73	80.38	80.36	80.41
G/C	300.0	315.0	330.0	345.0						
0.0	6886	6889	6887	6887						
3.0	6882	6882	6883	6883						
6.0	6870	6870	6869	6871						
9.0	6849	6851	6856	6850						
12.0	6825	6825	6828	6831						
15.0	6792	6790	6798	6799						
18.0	6753	6753	6755	6753						
21.0	6697	6697	6700	6699						
24.0	6628	6630	6635	6627						
27.0	6547	6545	6553	6547						
30.0	6443	6443	6445	6437						
33.0	6304	6286	6282	6267						
36.0	6057	6020	6006	5976						
39.0	5599	5556	5539	5491						
42.0	4879	4865	4860	4795						
45.0	4071	4065	4058	3962						
48.0	3270	3285	3277	3189						
51.0	2584	2615	2629	2557						
54.0	2080	2108	2123	2069						
57.0	1684	1700	1723	1688						
60.0	1363	1380	1413	1386						
63.0	1111	1130	1155	1136						
66.0	901.3	913.3	929.6	912.6						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: LUC

Test Date: 03 January 2018

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity: 65.0%

Test Distance: 8.000m [K=1.0000]

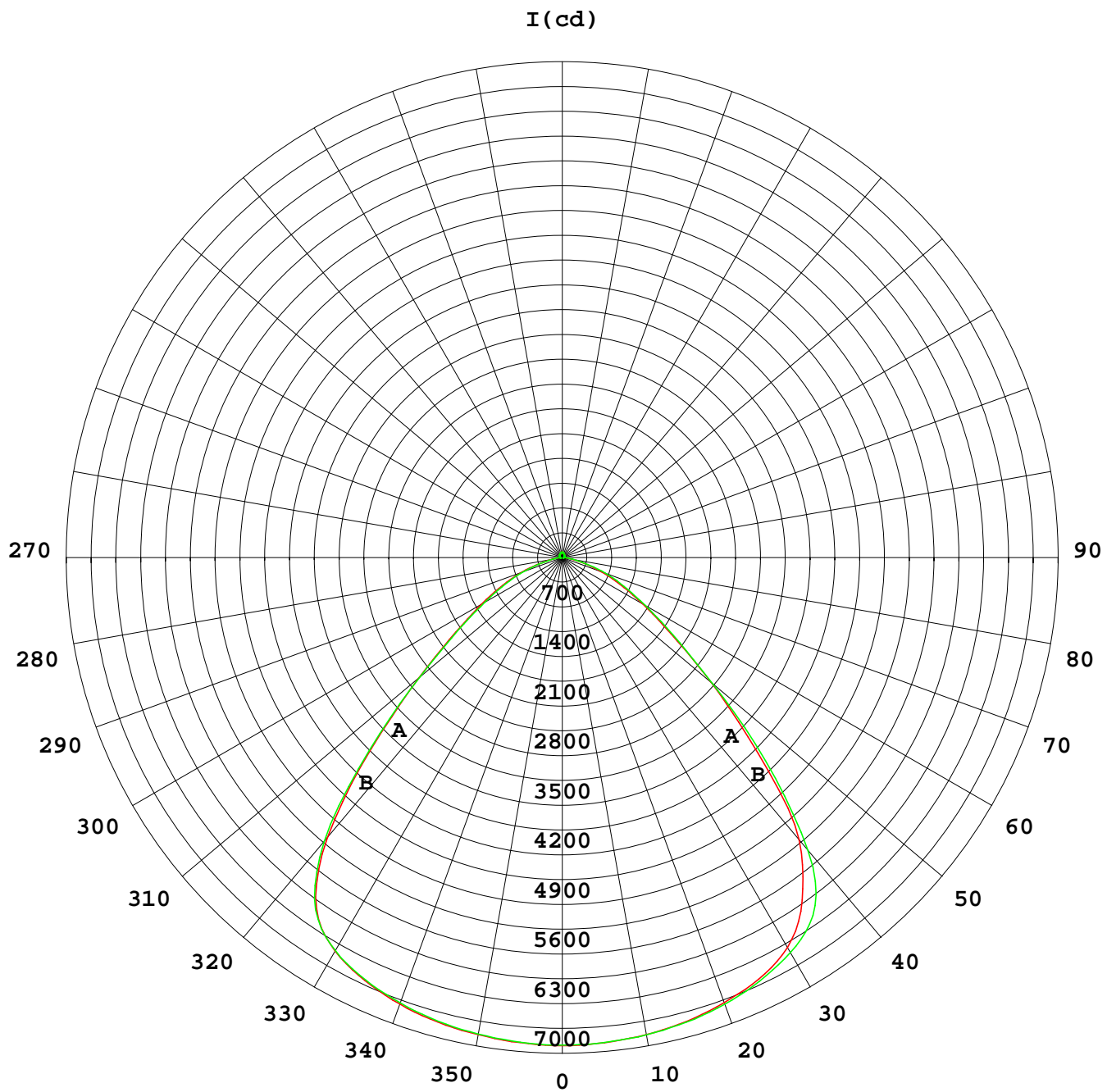
Remarks: HB2000-100G-C1-G5 288EA-90D_180914

Photometric Data Table [cd]

69.0	713.2	713.4	723.7	707.6
72.0	526.3	523.0	534.5	521.3
75.0	352.5	353.7	363.7	351.1
78.0	211.9	212.5	220.1	211.4
81.0	131.0	134.2	135.8	132.1
84.0	79.13	79.80	81.12	76.85
87.0	42.02	41.00	40.89	38.30
90.0	22.60	19.53	19.24	19.34
93.0	13.75	12.68	12.88	13.61
96.0	14.05	14.18	14.95	15.45
99.0	16.06	16.13	16.44	16.83
102.0	18.36	18.27	18.45	18.66
105.0	20.85	21.05	21.05	20.93
108.0	23.76	23.76	23.46	23.33
111.0	26.69	26.44	25.84	25.86
114.0	29.67	29.11	28.53	28.53
117.0	32.45	31.92	31.17	31.28
120.0	35.22	34.60	33.82	34.05
123.0	37.89	37.19	36.52	36.84
126.0	40.61	39.78	39.10	39.45
129.0	42.95	42.20	41.68	41.97
132.0	45.13	44.70	44.40	44.58
135.0	47.23	47.06	46.99	47.09
138.0	49.42	49.40	49.46	49.48
141.0	51.61	51.72	51.72	51.77
144.0	53.93	53.77	53.84	54.04
147.0	56.11	55.84	55.88	56.14
150.0	58.16	57.99	57.99	58.27
153.0	60.45	60.26	60.19	60.46
156.0	62.74	62.70	62.50	62.79
159.0	65.40	65.35	65.15	65.33
162.0	68.20	68.03	67.89	68.09
165.0	70.87	70.77	70.61	70.84
168.0	73.46	73.28	73.15	73.32
171.0	75.80	75.58	75.39	75.50
174.0	77.89	77.71	77.44	77.46
177.0	79.68	79.59	79.23	79.38
180.0	80.63	80.82	80.55	80.42

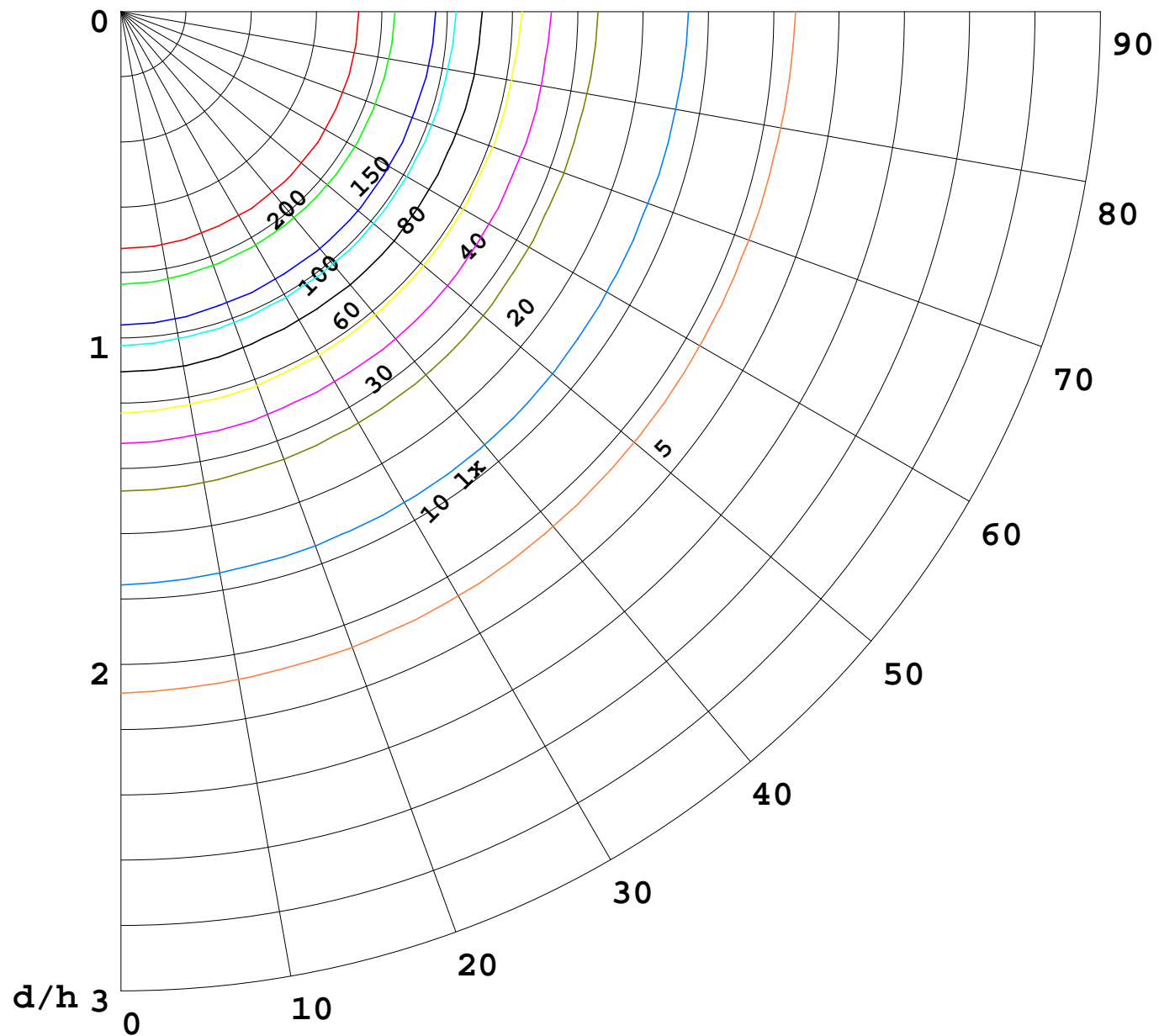
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LUC
Test Date: 03 January 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks: HB2000-100G-C1-G5 288EA-90D_180914



1000 lm

$K = 1$



F = 1000 lm
 K = 0.7
 H_{cc} = 0.8 m
 H_{fc} = 0.0 m
 E_{ave} = 100 lx

	P_{cc}	P_w	P_{fc}
—————	70	50	30
—————	50	30	20

